



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/601,555	09/11/2000	Turan Rodoslu	6525-01 WOUS	5785

7590 12/18/2003

McCormick Paulding & Huber  
CityPlace II  
185 Asylum Street  
Hartford, CT 06103-4102

EXAMINER
----------

LAZOR, MICHELLE A

ART UNIT	PAPER NUMBER
----------	--------------

1734

DATE MAILED: 12/18/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/601,555

Applicant(s)

RODOSLU ET AL.

Examiner

Michelle A Lazor

Art Unit

1734

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 11/7/03.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-13 and 15-28 is/are rejected.
- 7) ☒ Claim(s) 14 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 08032000 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It is unclear whether a mould is being claimed. For the purpose of examination, a mould will be assumed to be claimed.

### ***Claim Rejections - 35 USC § 102***

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1 and 5 – 11 are rejected under 35 U.S.C. 102(b) as being anticipated by Durinck (U.S. Patent No. 4119692).

Regarding Claims 1 and 5, Durinck discloses a device comprising a vibrating device (12) and a mould (10), characterized in that the vibration device (12) shows at least one vibration transfer element which grasps through at least one opening in the mould and strikes against a diaphragm covering the raw material mass in the mould on at least one side; wherein the diaphragm is configured corresponding to a desired shape of the concrete stone to be fabricated, (16) (Figures 1 and 2; column 1, lines 58 – 64). Thus Durinck discloses all the limitations of Claims 1 and 5, and anticipates the claimed invention.

Regarding Claims 6 – 10, Durinck discloses the vibrating device comprises a frame (11) in which a vibrating element or spring (16) is elastically positioned, the vibration transfer

Art Unit: 1734

element being mechanically coupled with the spring; characterized in that the vibrating element shows a weight rotatable off-center on an axle (column 1, lines 59 – 64); characterized in that an elastic bearing comprises several springs which are placed between the frame (11) and the vibrating element for the bearing of the latter in the frame (11); in that the frame (11) of the vibrating device is elastically supported on the mould; and that the elastic bearing comprises at least one spring which is placed between the frame (11) and the mould (10)(Figures 1 and 2). Thus Durinck discloses all the limitations of Claims 6 – 10, and anticipates the claimed invention.

Regarding Claim 11, Durinck discloses the vibrating device is configured movable relative to the mould (Figures 1 and 2). Thus Durinck discloses all the limitations of Claim 11, and anticipates the claimed invention.

4. Claims 1 – 3, 5, 6, and 8 – 12 are rejected under 35 U.S.C. 102(b) as being anticipated by Neth et al. (U.S. Patent No. 2831230).

Regarding Claims 1 – 3 and 5, Neth et al. disclose a device comprising a vibrating device and a mould (22), characterized in that the vibration device shows at least one vibration transfer element which grasps through openings in the mould above and below and respectively at least one vibration transfer element correspondingly above and below grasps through a respective opening and strikes against diaphragms covering the raw material mass in the mould (Figure 1; column 3, lines 14 – 29 and column 3, line 67 – column 4, line 9); wherein the vibration transfer element is at least one rod (35) and the diaphragm is configured corresponding to a desired shape of the concrete stone to be fabricated (Figure 1; column 4, lines 2 – 9). Thus Neth et al. disclose all the limitations of Claims 1 – 3 and 5, and anticipate the claimed invention.

Art Unit: 1734

Regarding Claims 6 and 8 – 10, Durinck discloses the vibrating device comprises a frame (16) in which vibrating elements or springs (17) are elastically positioned, the vibration transfer element being mechanically coupled with the springs (17); characterized in that an elastic bearing comprises several springs which are placed between the frame (16) and the vibrating element for the bearing of the latter in the frame (16); in that the frame (16) of the vibrating device is elastically supported on the mould (22); and that the elastic bearing comprises at least one spring which is placed between the frame (16) and the mould (22) (Figure 1). Thus Neth et al. disclose all the limitations of Claims 6 and 8 – 10, and anticipate the claimed invention.

Regarding Claims 11 and 12, Neth et al. disclose the vibrating device is configured movable relative to the mould, characterized in that a rod (48) is placed on a frame (44a) of the vibrating device (Figure 1; column 4, lines 27 – 55). Thus Neth et al. disclose all the limitations of Claims 11 and 12, and anticipate the claimed invention.

### ***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Durinck or Neth et al. as applied in Claim 1 above.

Both Durinck and Neth et al. do not specifically disclose the diaphragm is a metal plate. However, one in the art would know to use metal in the diaphragm plate to enhance robustness

Art Unit: 1734

and durability of the apparatus, as well as to use a strong and well-known material in the moulding apparatus.

7. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Neth et al. as applied in Claim 1 above, in view of Nash et al. (U.S. Patent No. 4369153).

Neth et al. disclose all the limitations of Claim 1, but do not specifically disclose in the area of the vibrating device, roller bearings on which the mould rests, wherein the roller bearings are connected elastically with the device. However, Nash et al. disclose in the area of the vibrating device, roller bearings on which the mould rests, wherein the roller bearings are connected elastically with the device (Figure 5; column 4, lines 55 – 68). Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to use a roller bearing as an equivalent alternative to springs as disclosed by Neth et al.

8. Claims 15 and 17 – 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Neth et al. as applied in Claim 1 above, in view of Duke et al. (GB 2222981A).

Regarding Claims 15, 17, and 20, Neth et al. disclose all the limitations of Claim 1, but do not specifically disclose a first station which supplies base plates from a base plate stack, a second station which applies a first raw material on the base plate; a third station which applies a second raw material onto the base plate with the first material; and a fourth station which vibrates the applied first and second materials, wherein the base plates are automatically conveyed to the stations. However, Duke et al. disclose initially providing a base plate or mould (M) to the apparatus, a second station (S1) to provide a first raw material (page 4, lines 7 – 21), a third station (S2) to provide a second raw material, and a fourth station which vibrates the applied first and second materials (T2), wherein the base plates are automatically conveyed to

Art Unit: 1734

the stations (Figure 1; page 5, lines 6 – 21). Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to use multiple stations with automatic conveying means where various materials may be used for a concrete block to increase production capability and to improve the durability of conventional concrete blocks (page 5, line 22 – page 6, line 4).

Regarding Claims 18 and 19, Neth et al. disclose base plates that form a bottom part of the mould, wherein there is at least one opening for at least one vibration transfer element (Figure 1; column 2, line 59 – column 3, line 13). Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to use a base plate that forms a bottom part of the mould, wherein there is at least one opening for at least one vibration transfer element so that the mould is subjected to only vertical movement to help form the concrete block (column 3, lines 48 – 59), and prevent excess rocking (column 3, lines 2 – 13).

9. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Neth et al. and Duke et al. as applied in Claim 15 above, in view of Wier (U.S. Patent No. 5863476).

Neth et al. and Duke et al. disclose all the limitations of Claim 15, but do not specifically disclose a fifth station where stones are stacked on a wagon. However, Wier discloses using a discharge station (44) where concrete stones are stacked on a wagon or similar device (Figure 2; column 5, lines 52 – 65). Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to use a discharge station where stones are stacked on a wagon or similar device to quickly remove the product from the apparatus for later use.

10. Claims 21 – 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Duke et al. in view of Neth et al.

Art Unit: 1734

Duke et al. disclose a method characterized by placement of a moulding box with a first funnel-shaped filling element (H1); filling of a first raw material mass into the moulding box; removal of the first funnel shaped filling element and placement of a second funnel-shaped filling element; and filling of a second raw material (H2) mass into the moulding box (page 4, line 7 – page 5, line 21); Duke et al. disclose using a smaller hopper for the second funnel-shaped filling element, however one in the art would know to switch the sizes of the two hoppers, thereby having a larger second funnel-shaped filling element, depending on what the desired final product configuration is (Figure 2). But Duke et al. do not disclose the moulding box on a base plate; the filling cross-section of the second funnel-shaped filling element to be bigger than that of the first funnel-shaped filling element; placement of diaphragms with vibration energy into the moulding box above and below the moulding box; wherein there is placed a moulding part or a moulding punch on the diaphragm above the moulding box. However, Neth et al. disclose a mould (22) on a base plate (18, 20); placement of diaphragms with vibration energy into the moulding box above and below the moulding box (Figure 1); wherein there is placed a moulding part or a moulding punch (44) on the diaphragm above the moulding box (column 2, line 59 – column 3, line 28 and column 4, lines 27 – 47). Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to use a base plate that includes diaphragms which have vibration energy that are located above and below the moulding box; so that the mould is subjected to only vertical movement to help form the concrete block (column 3, lines 48 – 59), to prevent excess rocking (column 3, lines 2 – 13); and it would have been obvious to include a moulding punch to increase compression in the mould and speed up the manufacturing process.



Art Unit: 1734

11. Claims 24, 27, and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Duke et al. and Neth et al. as applied in Claim 21 above, in view of Yamasita et al. (U.S. Patent No. 3955907).

Duke et al. and Neth et al. disclose all the limitations of Claim 21, but do not disclose the second raw material mass to be placed on the first raw material mass and on at least one side between the first raw material mass and a wall of the moulding box, as well as the second raw material mass being fabricated from a mixture of white cement, water, pigment, and aggregate in an appropriate ratio. However Yamasita et al. disclose two raw materials being placed side by side (Figures 1 and 4; column 3, lines 40 – 51), as well as a raw material mass being fabricated from a mixture of white cement, water, pigment, and aggregate in an appropriate ratio (column 2, Table; first layer, mixture II). Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to place raw materials side by side to form stone to avoid separately forming two or more layers of material (column 1, line 40 – column 2, line 9), and it would have been obvious to fabricate a mixture as disclosed above since it is shown to be well known and conventional in the art.

12. Claims 25 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Duke et al. and Neth et al. as applied in Claim 21 above, in view of Galer et al. (U.S. Patent No. 4450022).

Duke et al. and Neth et al. disclose all the limitations of Claim 21, but do not disclose the first raw material mass to be fabricated of a mixture of Portland cement, water, and aggregate in an appropriate ratio. However, Galer discloses the first raw material mass to be fabricated of a mixture of Portland cement, water, and aggregate in an appropriate ratio (column 6, lines 27 –

Art Unit: 1734

53). Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to fabricate a mixture as disclosed above since it is shown to be well known and conventional in the art.

### *Allowable Subject Matter*

13. Claim 14 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. There was no reference in the prior art search that disclosed, taught, or suggested a device for making concrete blocks as claimed in Claims 1 and 13 in combination with a roller bearing comprising a cylindrical body which shows a cylindrical recess on one side opposite the mound in which a spring is placed which rests on a machine frame of the device, whereby furthermore an incision with a rectangular cross-section is configured on one side of the cylindrical body turned to the mould, incision in which a roller which carries the mould is placed projecting over the cylinder.

### *Conclusion*

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Allison et al. (U.S. Patent No. 5219591) disclose an apparatus for producing blocks or stones, and includes means for adding two materials to the mould box (column 7, line 62 – column 8, line 11).

Art Unit: 1734

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michelle A Lazor whose telephone number is 703-305-7976; after 12/19/03, telephone number will be 571-272-1232. The examiner can normally be reached on Mon - Thurs 6:30 - 4:00, Fridays 6:30 - 3:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on 703-308-3853. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.



MAL  
12/11/03



MICHAEL COLAIANNI  
PRIMARY EXAMINER